

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE K		PAGE 1 OF 38 PAGES		
2. AMENDMENT/MODIFICATION NO. 0019		3. EFFECTIVE DATE May 24, 2001		4. REQUISITION/PURCHASE REQ. NO. SCO600-00-0697		5. PROJECT NO. (If applicable)	
6. ISSUED BY DEFENSE ENERGY SUPPORT CENTER 8725 JOHN J. KINGMAN ROAD, SUITE 4950 FT. BELVOIR, VA 22060-6222 FAX (703) 767-8757 BUYER/SYMBOL - MIKE WHITE/DESC-APP PHONE (703) 767-9653 P.P. 8.2			CODE SCO600		7. ADMINISTERED BY (If other than Item 6) CODE		
8. NAME AND ADDRESS OF CONTRACTOR (NO., street, city, county, State, and ZIP Code)					X	9a. AMENDMENT OF SOLICITATION NO. SP0600-00-R-0009	
						10a. MODIFICATION OF CONTRACT/ORDER NO.	
						10b. DATED (SEE ITEM 13)	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<p>[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [] is extended, [X] is not extended</p> <p>Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. 12.05 CHANGES-FIXED PRICE (AUG 87)							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.01							
OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor [] is not, [] is required to sign this document and return _____ copies to the issuing office.							
13. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) <p style="text-align: center;">** Please Note: This Amendment applies to the Fort Bliss Army Installation**</p> <p style="text-align: center;">SEE THE FOLLOWING PAGES</p> <p>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</p>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME OF CONTRACTING OFFICER JACOB R. MOSER			
15B. NAME OF CONTRACTOR/OFFEROR BY (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)		16C. DATE SIGNED	

The purpose of this Amendment is to replace the existing Utility Specific Section J's (J5, J31, & J32) for the Fort Bliss Army Installation with revised Utility Specific Section J's attached.

A. Please replace all previous versions of J5 - Water Distribution, J31 - Electrical Distribution, & J32 - Wastewater Collection Systems, dated prior to May 2001, for Fort Bliss with the attached Section J's. Interested parties are asked to delete all previous versions and utilize the information contained within the attached Section J documents to aid in preparation of their proposal.

B. The attached Section J5 is hereby incorporated into the Texas Regional Demonstration RFP for Fort Bliss, in it's entirety: A summary of changes are also provided below:

Removed paragraph J5.2.1, sentence 2 – “Generally, the point of demarcation will be the building footprint”.

Revised paragraph J5.2.1, paragraph 1, last sentence from, “...Contractor be entitles to any...” to “...Contractor be entitled to any...”.

Revised TABLE 1 – Fixed Inventory, column headings from;

“Quantity on Main Post.” to “Approx. Quantity on Main Post”

“Quantity on Ranges” to “Approx. Quantity on Ranges”

“Total” to “Approx. Total”

Revised previous paragraphs J5.8 – Service Area and J5.9 Off-Installation Sites to read as now outlined at paragraph J5.8 and J5.9 of revised Section J5.

Revised paragraph J5.10 – Government Recognized System Deficiencies to read as now outlined at paragraph J5.10 of revised Section J5.

Added paragraphs J5.11 through J5.13

ATTACHMENT J5

U.S. Army Fort Bliss Water Distribution System

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J5.0 U.S. Army Fort Bliss Water Distribution System

J5.1 U.S. Army Fort Bliss Overview

The U.S. Army Fort Bliss was established in November 1848 as the Post of El Paso. In March 1854, it was renamed Fort Bliss in honor of William Wallace Smith Bliss, a veteran of the Florida Seminole and Mexican Wars and later adjutant general of the Army’s Western Division. Originally established to protect settlers from Indians and marauding

bandits, it is one of the oldest posts in the United States Army. Although both infantry and cavalry soldiers could once be found on Fort Bliss, today the mission focus is on air defense artillery. As the center for air defense, Fort Bliss' partner organizations include:

11th Air Defense Artillery Brigade

3rd Armored Cavalry Regiment

William Beaumont Army Medical Center

U. S. Army Sergeants Major Academy

"Capstone" school in the U.S. Army's Noncommissioned Officer Education System

Joint Task Force Six

German Air Force Command (United States/Canada)

German Air Defense School

The U.S. Army Fort Bliss is located at the tip of West Texas on the borders of Texas and New Mexico. With 1.1 million acres, the Post is larger than the state of Rhode Island and can accommodate every weapon system in the Army. Although the main cantonment area is located in Texas, ranges extend into the state of New Mexico. Excellent ranges and immense training areas, coupled with America's third longest runway at Biggs Army airfield, make Fort Bliss a premier facility for training, mobilization, and deploying combat forces. Each year, many military training exercises occur at the Post, including the largest joint training exercise in the world, Roving Sands.

J5.2 Water Distribution System Description

J5.2.1 Water Distribution System Fixed Equipment Inventory

The U.S. Army Fort Bliss water distribution system consists of all appurtenances physically connected to the distribution system from the point at which the water is produced from government owned wells, to the point of demarcation defined by the real estate instruments. The system may include, but is not limited to, wells, pipelines, valves, fire hydrants, pumps, tanks, and meters. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The Offeror shall base the proposal on site inspections, information in the bidder's library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the successful Contractor be entitled to any adjustment based on the accuracy of the following description and inventory.

The water rights possessed by the U.S. Army Fort Bliss will not in any way shape or form be transferred to the Offeror as a result of any privatization action, or be considered as part of this scope.

Fort Bliss is considering implementation of a re-use watering system for parade grounds and other large turf areas, which will take treated sewage water from the City of El Paso or from an, as yet to be constructed, Fort Bliss water treatment facility. If implemented, the successful Offeror will be required to accept ownership of all re-use water piping, valves, pumps, tanks, and other appurtenances associated with the re-use watering system.

Fort Bliss is also considering installation of a brackish water desalination plant on the range just off the main cantonment area. If installed, the successful Offeror will be required to accept ownership of all piping, valves, pumps, tanks, and other appurtenances from the outfall of the plant to the connection to the existing raw water collection system.

J5.2.1.1 Description

The water treatment and distribution system at U.S. Army Fort Bliss consists of groundwater wells, non-chlorinated lines, main distribution trunk lines, treatment facilities, booster pump stations, distribution mains, and elevated and ground storage tanks. The U.S. Army Fort Bliss provides treated water to the Main Post and outlying ranges from government owned water treatment facilities and via the interconnects to the City of El Paso's water system.

There are 13 wells that supply ground water to the U.S. Army Fort Bliss Main Post area. The total capacity of all wells is 13,516 gallons per minute. The depths of the wells range from 295' to 398'. Eleven non-chlorinated lines transfer raw water from the wells to the treatment facility. The total length of non-chlorinated lines is 57,180 feet. The treatment facility receives the raw water from the wells, then chlorinates and fluoridates the water, provides contact time, and pumps the water to storage tanks. Within the facility is a Williams Electric Co. monitoring system, which displays the water surface elevations in each of the storage tanks and the pump flow rates.

There are four main distribution trunk lines that transfer water from the pumps at the treatment facility to various areas within the Main Post. There are no individual services from these trunk lines. There are six booster pump stations and 20 water storage tanks located throughout the Main Post. Thirteen of the tanks are ground storage tanks with a total storage volume of 9,608,000 gallons. The remaining seven tanks are elevated storage tanks with a total storage volume of 2,900,000 gallons. The water level in each of the tanks is telemetered to the water treatment facility. The chlorinated water lines form the network for delivering potable water to the various services throughout the Main Post. The lines generally start at the water storage tanks or from the distribution lines off of the storage tanks, and terminate at service connections. Within the system there are about

811,718 feet of water main ranging in size from 2" to 20". The Main Post also contains 947 main line valves and 1059 fire hydrants. The water system is controlled by a computerized level control and scheduling system which has recently been upgraded by Williams Electric company.

J5.2.1.2 Inventory

Table 1 provides a general listing of the major collection system fixed assets for the U.S. Army Fort Bliss water distribution system included in the purchase. The system will be sold in an "as is, where is" condition without any warranty, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Water Distribution System Inventory U.S. Army Fort Bliss

Item	Unit	Approx. Quantity on	Approx. Quantity on	Approx. Total
		Main Post	Ranges	
Pipe 2"	LF	785	860	1,645
2.5"	LF	0	345	345
3"	LF	8,996	525	9,521
4"	LF	41,170	3,955	45,125
6"	LF	345,533	49,600	395,133
8"	LF	203,967	24,260	228,227
10"	LF	101,777	5,305	107,082
12"	LF	57,635	27,955	85,590
14"	LF	6,200	0	6,200
16"	LF	28,015	0	28,015
20"	LF	17,640	0	17,640
Meters	Each	4	0	4
Building Services	Each	0	0	0

Main Valves	Each	947	92	1,039
Post Indic. Valves	Each	58	15	73
Fire Hydrants	Each	1,059	72	1,131
Ground Storage Tanks	Each	*13	2	15
Elevated Tanks	Each	7	5	12
Wells	Each	13	2	15
Booster Pump Stations	Each	6	0	6

LF = Linear Feet

* Note: Three of these tanks are designated as water reservoirs

J5.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Water Distribution System U.S. Army Fort Bliss

Qty	Item	Make/Model	Description	Remarks
None Identified				

TABLE 3
Specialized Equipment and Vehicles
Water Distribution System U.S. Army Fort Bliss

Description	Quantity	Location	Maker
None Identified			

J5.2.3 Water Distribution System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Water Distribution System U.S. Army Fort Bliss

Qty	Item	Description	Remarks
None Identified or Furnished in Technical Library	Same	Same	Same

J5.3 Specific Service Requirements

None Identified.

J5.4 Current Service Arrangement

The water treatment and distribution system at U.S. Army Fort Bliss consists of groundwater wells, non -chlorinated lines, main distribution trunk lines, treatment facilities, booster pump stations, distribution mains, and elevated and ground storage tanks. The U.S. Army Fort Bliss provides treated water to the Main Post from government owned water treatment facilities and from interconnects to the City of El Paso's water system.

J5.5 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J5.5.1 Existing Secondary Meters

TABLE 5
Existing Secondary Meters
Water Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
Approximately 100 locations to be furnished in technical library	

J5.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3, H.5, and J5.5 below.

TABLE 6
New Secondary Meters
Water Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
None Identified	

J5.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: Raymond Balderas

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name: Roger Briney

Address: Building 777, Room 320, Fort Bliss, Texas 79916

Phone number:

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name: Raymond Balderas

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name: Joe E. Mathis

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

J5.7 Water Conservation Projects

IAW paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for water conservation purposes:

Installation of low flow toilets

Installation of ground source heat pumps in new family housing

Installation of xeriscape landscaping throughout the Installation

J5.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the U.S. Army Fort Bliss boundaries to include the main cantonment area, Site Monitor Station, McGregor Range, Oro Grande Range Camp, Dona Ana Range Camp, Biggs Army Airfield Logan Heights and Tobin Wells Area.

Nearby to U.S. Army Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, Army family housing and laboratory facilities that support the hospital activities and other Fort Bliss active and tenant components. The requirement for water service to the Beaumont Medical Center is part of and associated with this scope.

J5.9 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the U.S. Army Fort Bliss Water Distribution system.

TABLE 7
Service Connections and Disconnections
Water Distribution System U.S. Army Fort Bliss

Location	Description
To be included in Technical Library if Available	

J5.10 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Fort Bliss, TX water distribution system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

The Directorate of Public Works has identified "Notice of Violation's (NOV's) associated with backflow prevention devices. The Director of Public works has conducted a study, which has recently been completed to correct this NOV's. The Study recommends as one option that the elevated water storage tanks (#129, #493 and #5300) be

upgraded/replaced to provide the proper water pressure to operate the required backflow prevention devices. The offerors are required to address these NOV's in their proposal and how they plan to technically correct this deficiency as well as address the cost to correct this deficiency in their price proposal.

In addition to the noted NOVs the Ft. Bliss, Directorate of Publics Works has identified additional system deficiencies in the 1800 Area that requires the replacement of mains and laterals. System improvements to include hydrants in the McGregor, Dona Ana, and Oro Grande Range Camps have also been identified.

TABLE 8
System Deficiencies
Water Distribution System Fort Bliss, TX

Project Location	Project Description
Area 1800	Replace mains and laterals
Postwide	Replace 3 elevated storage tanks, #129 – 150 Kgal, #493 – 500 Kgal and #5300 – 1,500 Kgal
Postwide	Correct waterline deficiencies, including hydrants
Postwide	Replace 3 water reservoirs, #1318 - 558 Kgal, #11172 - 600 Kgal, #4317 - 500 Kgal
McGregor Range Camp	System improvements including hydrants
Dona Ana Range Camp	System improvements including hydrants
Oro Grande Range Camp	System improvements including hydrants

J5.11 Water Distribution System Points of Demarcation

The point of demarcation is defined as the point on the piping system where ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served.

Point of Demarcation	Applicable Scenario	Sketch

Point of Demarcation	Applicable Scenario	Sketch
Water Meter or Backflow Device, or Valve (closest apparatus to the exterior of the structure)	Water meter, backflow device, or valve is located on the service line entering the structure within 25 feet of the exterior of the structure.	
Point where the service line enters the structure	No water meter, backflow device, or valve exists on the service line entering the structure.	

J5.12 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above categories.

Building No.	Point of Demarcation Description
None	

J5.13 Plants and Towers

Description	Facility Number	State Coordinates	Other Information
Water Towers			

The following information was added by Amendment 0014:

Select buildings, structures, objects, sites, districts, and landscapes on Fort Bliss may be historic, that is, they may be listed or eligible for listing in the National Register of Historic Places (NRHP). An inventory of Fort Bliss identified historic properties is maintained by the Directorate of Environment, Conservation Division (DOE-C). Identified historic

properties will be maintained in accordance with the recommended approaches in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Review of undertakings affecting historic properties is required by Army regulation and Federal preservation law. Consequently, the Contractor shall notify the Fort Bliss Contracting Officer in advance of any proposed activities (operations, maintenance, repair, upgrades, and improvements) that may impact a historic property visually or through physical contact, or will result in ground disturbance. The Contractor will not undertake the proposed action until the Fort Bliss DOE-C notifies the Contractor in writing that historic preservation compliance obligations have been fulfilled and the undertaking may proceed.

Should any suspected archeological remains be inadvertently discovered after work begins, the contractor shall suspend work in the area of the discovery and make a reasonable effort to protect the area from further disturbance. Work may continue in other areas. The contractor shall immediately notify the Contracting Officer by telephone. The contractor will then provide written notification by certified mail to the Contracting Officer in the event of the inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (in compliance with the Native American Graves Protection and Repatriation Act of 1990 [25USC 3001-3013; 43 CFR 10]). This notification must include pertinent information as to the location of the discovery, the extent of the project affected, and a description of the kinds of remains discovered inadvertently, their condition, and the circumstances of their inadvertent discovery.

The Fort Bliss DOE-C will determine the nature and scope of any investigations required to identify, evaluate and mitigate adverse effects to historic properties in compliance with Section 106 of the NHPA and 36 CFR 800. The contractor will be responsible for any costs associated with such investigations; plus any costs associated with Native American consultation or repatriation of human remains, funerary objects, sacred objects, or objects of cultural patrimony; plus any costs due to associated delays.

In the event of an emergency posing imminent threat of loss to life, limb or property (such as a water or gas main rupture), the contractor may take immediate steps to contain the emergency, followed by notification to the Contracting Officer by telephone as soon as possible.

Contractor personnel will not hinder DOE personnel in investigating archaeological remains uncovered in any project area.

Public Works system shall be aware of rules and regulations (local, state, and federal) and must comply with all applicable requirements. Enforcement actions conducted as a result of failure to comply with the applicable rules and regulations shall be the responsibility of the manager/owners of the Public Works system.

C. The attached Section J31 is hereby incorporated into the Texas Regional Demonstration RFP for Fort Bliss, in it's entirety: A summary of changes are also provided below:

Removed paragraph J31.2.1, sentence 2 – “Generally, the point of demarcation will be the building footprint”.

Revised paragraph J31.2.1, last sentence from, “...Contractor be entitles to any...” to “...Contractor be entitled to any...”.

Revised TABLE 1 – Fixed Inventory, column heading from “QTY.” to “APPROX. QTY.”.

Revised previous paragraphs J31.8 – Service Area and J31.9 Off-Installation Sites to read as now outlined at paragraph J31.8 and J31.9 of revised Section J31.

Revised paragraph J31.11 - Government Recognized System Deficiencies to read as now outlined at paragraph J31.11 of revised Section J31.

Added paragraphs J31.11 through J31.13

ATTACHMENT J31

U.S. Army Fort Bliss Electrical Distribution System

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J.31.1 U.S. Army Fort Bliss Overview

The U.S. Army Fort Bliss was established in November 1848 as the Post of El Paso. In March 1854, it was renamed Fort Bliss in honor of William Wallace Smith Bliss, a veteran of the Florida Seminole and Mexican Wars and later adjutant general of the Army’s Western Division. Originally established to protect settlers from Indians and marauding bandits, it is one of the oldest posts in the United States Army. Although both infantry and cavalry soldiers could once be found on Fort Bliss, today the mission focus is on air defense artillery. As the center for air defense, Fort Bliss’ partner organizations include:

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- 3rd Armored Cavalry Regiment
- William Beaumont Army Medical Center
- U. S. Army Sergeants Major Academy
- “Capstone” school in the U.S. Army’s Noncommissioned Officer Education System
- Joint Task Force Six
- German Air Force Command (United States/Canada)
- German Air Defense School

The U.S. Army Fort Bliss is located at the tip of West Texas on the borders of Texas and New Mexico. With 1.1 million acres, the Post is larger than the state of Rhode Island and can accommodate every weapon system in the Army. Although the main cantonment area is located in Texas, ranges extend into the state of New Mexico. Excellent ranges and immense training areas, coupled with America's third longest runway at Biggs Army airfield, make Fort Bliss a premier facility for training, mobilization, and deploying combat forces. Each year, many military training exercises occur at the Post, including the largest joint training exercise in the world, Roving Sands.

J.31.2 Electrical Distribution System Description

J31.2.1 Electrical Distribution System Fixed Equipment Inventory

The U.S. Army fort Bliss electric distribution system consists of all appurtenance physically connected to the distribution system from the point in which the distribution system enters the Base, and/or Government ownership currently, starts to the point of demarcation defined by the real estate instruments. The system may include, but is not limited to, substations, transformers, underground and overhead circuits, utility poles, switches, vaults, and lighting fixtures. The Following description and inventory is included to provide the Offeror a general understanding of the size and configuration of the distribution system. The Offeror shall base the proposal on site inspections, information in the bidders library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

J31.2.1.1 Description

Fort Bliss currently purchases its electrical power requirements from El Paso Electric (EPECo).Fort Bliss then redistributes the electrical power from the Installation's main and auxilliary substations with EPECo throughout the main cantonment area and facilities utility service areas via 397 circuit miles (approximate) of overhead and underground primary and secondary distribution lines. In addition to the main cantonment area, Fort Bliss has several off-post ranges that have electrical distribution systems and equipment. These include Site Monitor Station, McGregor Range, Oro Grande Range, and Dona Ana Range. These are remote stations for radar and missile sites and various training purposes. In addition, nearby to Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, and laboratory and other facilities to support the hospital activities. Also, there is Biggs Army Airfield, which is still active. The airfield is an integral part of the Installation and is supported by its own sub station which is fed from EPECo's Butterfield sub station.

The electrical power utility distribution system consists of:

- approximately 184 circuit miles of overhead primary distribution lines

- approximately 67 circuit miles of underground primary distribution lines

approximately 63 circuit miles of overhead/underground secondary lines

approximately 83 circuit miles of overhead/underground lighting circuits

approximately 155 power circuit breakers/switches/reclosers

The electrical distribution system is extensive, consisting primarily of overhead circuitry. There is one large power substation on the main cantonment area that has divided ownership. The high side of the substation is fed by the El Paso Electric Company (EPECo) at 115 kV; the 115/13.8 kV transformer and protection equipment are owned by EPECo. The Army owns the low side of the substation, which consists of steel framework, bus work, low side circuit breakers, metering equipment, regulators, and stand-by generators. The low side voltage from the main substation has different levels. One is 13.2 kv wye, one is 13.8 kv delta, and another is 4.16 kv wye. The ten circuit breakers and associated relaying equipment are approximately five years old. The remaining equipment is approximately 40-45 years old.

The primary method of distribution is by overhead feeders constructed on single wood pole structures with wood cross arms. The electrical system is quite old. Many of the distribution loops were constructed originally in World War II and have since been gradually modified. The pole dates that were obtained ranged from the sixties to the mid-eighties; however, some of the poles were so old that the brand marks were not legible. The overhead conductor sizes range from #2 copper to 336 ACSR. The overall condition of the system appears to be poor-to-fair.

Ft. Bliss has very limited manpower with which to perform maintenance. At this time, they have four high-voltage technicians and very little equipment of their own. The Installation leases the necessary pieces of equipment (bucket trucks, etc.) to do their work. Maintenance on the system is performed on a failure or break-down basis. Currently, Ft. Bliss is not staffed to perform comprehensive preventive maintenance.

In addition to the main cantonment, Fort Bliss has several off-post ranges that have electrical distribution systems and equipment. These include Site Monitor Station, McGregor Range, Oro Grande Range, and Dona Ana Range. The remote stations are for radar and missile sites and various training purposes. In addition, nearby to Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, laboratory, and other facilities to support the hospital activities. Beaumont Hospital is fed from a new meter station located south of the main building on Piedras Street. Also, there is Biggs Army Airfield, which is still active. The airfield is an integral part of the Installation and is supported by its own sub station which is fed by EPECo's Butterfield sub station. All of these areas are also the responsibility of the Fort Bliss Directorate of Public Works.

In addition to the overhead feeders that serve the area, there are a number of underground circuits that feed selected headquarters areas, some housing areas, and

range operations areas. Many underground feeders are protected in concrete-encased duct banks. The underground feeders are about 25 years old.

Since this inventory was performed, a number of buildings have been built (barracks, dining facilities, etc.) and a number of old buildings have been demolished. The new/planned construction of barracks complexes, dining facilities, and residential housing will require improvements or extensions of existing power distribution facilities. The total of these improvements will raise the overall Fair Value by an estimated increment of \$450,000 when completed. The system electrical drawings furnished do not reflect these changes. Future drawing revisions will be necessary.

The electrical distribution system at Fort Bliss utilizes an old construction practice of installing pole type transformers in fenced ground level or vaulted configurations with exposed bushings, transformer leads and bus works. This type of installation violates current safety standards and practices relating to clearances to live parts (NESC, Sec. 124) and will need to be replaced with facilities in compliance with Code requirements. The combination of site visits and drawing reviews identified a total of 55 transformer bank sites that may require replacement or extensive modification to conform to Code safety requirements. The rectification of these 55 sites will cost an estimated \$2.2 million. This cost item will be a deduction from the Estimated Fair Value until it is resolved. In 1999, a complete survey of all transformer poles was conducted to ensure the safety of ground wires. The survey cost in excess of \$500K.

J31.2.1.2 Inventory

Table 1 provides a general listing of the major electrical system fixed assets for the U.S. Army Fort Bliss electrical distribution system included in the purchase. The system will be sold in an “as is, where is” condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Electrical Distribution System Inventory U.S. Army Fort Bliss

ITEM	APPROX		UNIT	APPROX. CONSTRUCTION YEAR
	QTY.			
Overhead Lines				
3 Ph. - Open Wire Large	24.51	mi		1971
3 Ph. - Open Wire Small	122.81	mi		1971

	1 Ph. - Open Wire	36.46 mi	1971
GOAB Switch / Recloser / Oil Sw.		115 ea	1971
Secondary		45.95 mi	1973
Underground Lines			
	3 Ph. - Large	2.41 mi	1983
	3 Ph. - Small	48.57 mi	1983
	1 Ph.	16.30 mi	1983
Duct Bank		29.95 mi.	1983
Manholes		250 ea.	1974
Sectionalizing Switches		18 ea	1983
Secondary		16.82 mi	1983
Transformers - Pole Type			
	15 kVA & smaller	417 ea	1964
	25 kVA	631 ea	1964
	37.5 kVA	411 ea	1964
	50 kVA	518 ea	1964
	75 kVA	260 ea	1964
	100 kVA	200 ea	1964
	167 kVA	64 ea	1964
	250 kVA	6 ea	1964
	333 kVA	3 ea	1964
	500 kVA	6 ea	1964
Transformers - Pad Mount			
	1P - 15 kVA & smaller	72 ea	1974
	1P - 25 kVA	29 ea	1974
	1P - 37.5 kVA	5 ea	1974
	1P - 50 kVA	18 ea	1974
	1P - 75 kVA	36 ea	1974
	1P - 100 kVA	61 ea	1974
	1P - 167 kVA	2 ea	1974
	3P - 112.5 kVA & smaller	34 ea	1974

3P - 150 kVA	15	ea	1974
3P - 225 kVA	14	ea	1974
3P - 300 kVA	20	ea	1974
3P - 500 kVA	20	ea	1974
3P - 750 kVA	8	ea	1974
3P - 1000 kVA	10	ea	1974
3P - 1500 kVA	2	ea	1974
3P - 2000 kVA	2	ea	1974
3P - 2500 kVA	1	ea	1974
3P - 3750 kVA	1	ea	1974

Street Lights

Fixtures	3509	ea	1983
Poles	2385	ea	1983
Lighting Circuits	83.55	mi	1983

Services

3 Phase	1028	ea	1979
1 Phase	3183	ea	1979

Substations

Structure / Buswork	1	lot	1967
Circuit Breakers / Switchers	22	ea	1996
Regulator	14	ea	1996
Miscellaneous (20%)	1	lot	1996

Table 2 Acronyms

KVA =	Nominal Kilovolt Amperes
MVA =	Megavolt Amperes
mi =	miles
ea =	each
Ph =	Phase

J31.2.2 Electrical Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and Table 3 lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Electrical Distribution System U.S. Army Fort Bliss

Qty	Item	Make/Model	Description	Remarks
None Identified.	Same	Same	Same	

TABLE 3
Specialized Equipment and Vehicles
Electrical Distribution System U.S. Army Fort Bliss

Description	Qty	Location	Maker
None Identified			

J31.2.3 Electrical Distribution System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Electrical Distribution System U.S. Army Fort Bliss

Qty	Item	Description	Remarks
None Identified	Same	Same	Same

J31.3 Specific Service Requirements

None Identified.

J31.4 Current Service Arrangement

Fort Bliss currently purchases its electrical power requirements from El Paso Electric (EPECo) under the Utility’s Rate 31, Military Reservations, and Rate 27, Interruptable Power. The first 16 megawatts is delivered firm, while consumption over 16 megawatts is interruptable.

J31.5 Secondary Metering

The Installation presently has secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J31.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW paragraphs H.5 and J31.5 below.

TABLE 5
Existing Secondary Meters
Electrical Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
150+ meters to be provided during site visit	150+ meters to be provided during site visit

J31.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3, H.5, and J31.5 below.

TABLE 6
New Secondary Meters
Electrical Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
None Identified	

J31.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name:

Address:

Phone number:

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:

Address:

Phone number:

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:

Address:

Phone number:

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name:

Address:

Phone number:

J31.7 Energy Savings Projects

IAW paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I:

Utility Monitoring & Control System on 63 buildings

Postwide lighting retrofit

Automated meter reading system (ITRON)

J31.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the U.S. Army Fort Bliss boundaries to include the main cantonment area, Site Monitor Station, McGregor Range, Oro Grande Range, Dona Ana Range, Biggs Army Airfield, Logan Heights and Tobin Wells Area.

Nearby to Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, Army family housing, laboratory, and other facilities that support the hospital activities and various Fort Bliss active and tenant components. The requirement for electric service to the Beaumont Medical Center and Fort Bliss activities at this off installation site are part of and associated with this scope.

J31.9 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the U.S. Army Fort Bliss electrical distribution system.

TABLE 7

Service Connections and Disconnections

Electrical Distribution System U.S. Army Fort Bliss

Location	Description
None Identified	

TABLE 8
System Improvement Projects

Project Location	Project Description
Postwide	Transformer safety upgrades

J31.10 Government Recognized System Deficiencies

Table 9 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Fort Bliss electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 9
System Deficiencies
Electric Distribution System Fort Bliss, TX

Project Location	Project Description
Well circuit #6	Line and pole replacement
Pike circuit #7	Line and pole replacement
Pleasanton circuit #9	Line and pole replacement
Substation B 5885	Circuit breaker and tie breaker replacement
Postwide	100% line and pole inspection and repair/upgrades as required

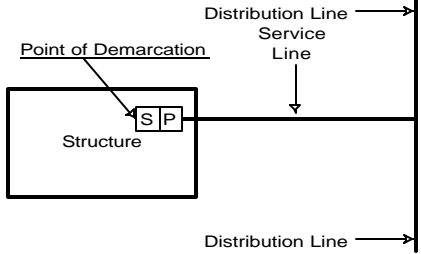
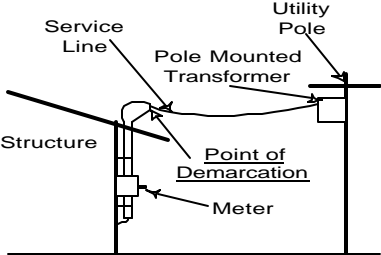
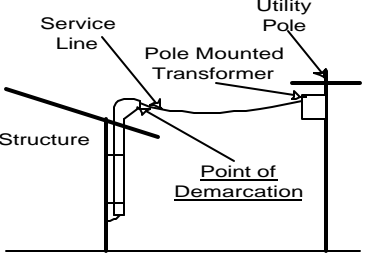
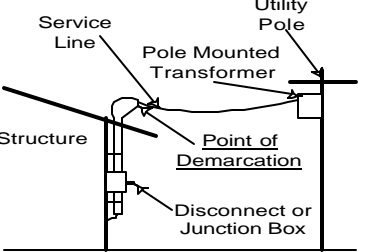
The Ft. Bliss, Directorate of Publics Works has identified a system deficiency at the main substations entering the base. The deficiency identified is related to the electronic breakers and their calculated rating as far as code compliance for the associated ground fault interrupt are concerned. Additional deficiencies are identified regarding the lines and poles serving; Well circuit #6, Pike circuit #7 and Pleasanton circuit #9. A requirement to

perform a pole and line survey, record results and repair/replace/upgrade as required (throughout the U.S. Army Ft. Bliss) is also identified.

J31.11 Electric Distribution System Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a transformer within a building structure. The table below identifies the type and general location of the point of demarcation with respect to the building for each scenario.

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the transformer secondary terminal spade.	Pad Mounted Transformer located outside of structure with underground service to the structure and no meter exists.	
Down current side of the meter	Residential service (less than 200 amps and 240V 1-Phase), and three phase self contained meter installations. Electric Meter exists within five feet of the exterior of the building on an underground secondary line.	
Point of demarcation is the transformer secondary terminal spade.	Three Phase CT metered service.	
Secondary terminal of the transformer inside of the structure	Transformer located inside of structure and an isolation device is in place with or without a meter Note: Utility Owner must be granted 24-hour access to transformer room.	

Point of Demarcation	Applicable Scenario	Sketch
Secondary terminal of the transformer inside of the structure	Transformer located inside of structure with no isolation device in place. Note: Utility Owner must be granted 24-hour access to transformer room.	
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Electric meter is connected to the exterior of the building on an overhead secondary line.	
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Pole Mounted Transformer located outside of structure with secondary attached to outside of structure with no meter.	
Point of demarcation is the point where the overhead conductor is connected to the weatherhead.	Service may be overhead or underground. A disconnect switch or junction box is mounted to the exterior of the structure with no meter.	

J31.12 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Building No.	Point of Demarcation Description
None	

J31.13 Plants and Substations

Description	Facility #	State Coordinates	Other Information
<i>None</i>			

D. The attached Section J32 is hereby incorporated into the Texas Regional Demonstration RFP for Fort Bliss, in it's entirety: A summary of changes are also provided below:

Removed paragraph J32.2.1, sentence 2 – “Generally, the point of demarcation will be the building footprint”.

Revised TABLE 1 – Fixed Inventory, column heading from “QTY.” to “APPROX. QTY.”.

Revised previous paragraphs J32.8 – Service Area and J32.9 Off-Installation Sites to read as now outlined at paragraph J32.8 and J32.9 of revised Section J32.

Revised paragraph J32.11 - Government Recognized System Deficiencies to read as now outlined at paragraph J32.11 of revised Section J32.

Added paragraphs J32.12 through J31.14

ATTACHMENT J32
U.S. Army Fort Bliss Wastewater Collection System

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J32 U.S. Army Fort Bliss Wastewater Collection System

J32.1 U.S. Army Fort Bliss Overview

The U.S. Army Fort Bliss was established in November 1848 as the Post of El Paso. In March 1854, it was renamed Fort Bliss in honor of William Wallace Smith Bliss, a veteran of the Florida Seminole and Mexican Wars and later adjutant general of the Army’s Western Division. Originally established to protect settlers from Indians and marauding bandits, it is one of the oldest posts in the United States Army. Although both infantry and cavalry soldiers could once be found on Fort Bliss, today the mission focus is on air defense artillery. As the center for air defense, Fort Bliss’ partner organizations include:

- 11th Air Defense Artillery Brigade
- 3rd Armored Cavalry Regiment
- William Beaumont Army Medical Center
- U. S. Army Sergeants Major Academy
- “Capstone” school in the U.S. Army’s Noncommissioned Officer Education System
- Joint Task Force Six
- German Air Force Command (United States/Canada)
- German Air Defense School

The U.S. Army Fort Bliss is located at the tip of West Texas on the borders of Texas and New Mexico. With 1.1 million acres, the Post is larger than the state of Rhode Island and can accommodate every weapon system in the Army. Although the main cantonment area is located in Texas, ranges extend into the state of New Mexico. Excellent ranges and immense training areas, coupled with America’s third longest runway at Biggs Army airfield, make Fort Bliss a premier facility for training, mobilization, and deploying combat forces. Each year, many military training exercises occur at the Post, including the largest joint training exercise in the world, Roving Sands.

J 32.2 Wastewater Collection System Description

J 32.2.1 Wastewater Collection System Fixed Equipment Inventory

The U.S. Army Fort Bliss wastewater collection system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the real estate instruments to the point in which the collection system exits the base and current Government ownership ends. The system may include, but is not limited to, pipelines, lift station, and manholes. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the collection system. The Offeror shall base the proposal on site inspections, information in the bidder’s library, other pertinent information, and to a

lessor degree the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

J32.2.1.1 Description

The U.S. Army Fort Bliss wastewater system consists of collection lines, lift stations, and a sewage lagoon. All sewage generated on U.S. Army Fort Bliss is collected by the sewer system and pumped to the City of El Paso for treatment, except for a lagoon that is in Area 637. There are no treatment facilities on the Main Post, other than the lagoon in Area 637. Wastewater personnel are also responsible for the wastewater systems within all the ranges. Since many of the ranges are in remote locations, many have sewage lagoons that provide treatment, while others have septic tanks (that are not included in this study).

The sanitary collections system on Main Post consists of 553,094 feet of sewer lines ranging in size from 6" to 30", with 8" being the most common size. There are also 1,839 manholes and one lift station. The age of the wastewater collection system on Main Post ranges from fairly new to over 80 years old. There are four sewage collection systems recently constructed in the Main Post area. These are:

CGO Site. CGO site, constructed in 1998, is a new housing areas consisting of 1,305' of 8" sewer line and 6 manholes.

NCO Site NCO site is a family housing area constructed in 1998. Within the area, there are 2,165' of 8" sewer line and 9 manholes.

FY93 FY93 is a housing area constructed in 1997 and consists of 9,975' of 8" sewer line with 45 manholes.

FY95 FY95 is a housing area constructed in 1996 and consists of 6,105' of 8" sewer line and 25 manholes.

The sewer line quantities were taken from constructed record drawings. The sewage generated in all of the above areas flows to the existing sewer system on the Main Post.

The wastewater system at the Site Monitor basically consists of sewer lines from individual buildings that flow to either septic tanks and disposal fields, or to dry wells. (The site was not included in the inventory.)

The wastewater system at the McGregor/Meyer Range is a small system that collects sewage from latrines and from a bivouac area. The collected sewage flows to a lift station where it is pumped to an oxidation pond. The lift station has a rated flow of 390 gpm and the oxidation pond has a volume of 2.44 million gallons. The wastewater system consists of 4,890' of 8" sewer line and 6 manholes in addition to the lift station and oxidation pond. The sewerage system was constructed in 1962. (Not included in this inventory is a part of the system consisting of individual latrines connected to a septic tank and disposal field.)

The wastewater system at McGregor Range Camp consists of a collection system for handling wastewater from a number of buildings. The wastewater drains to the south for treatment in an oxidation pond. The collection system consists of 4,470' of 10" sewer lines, 13,600' of 8" sewer lines, and 57 manholes. The sewerage system was constructed in 1962.

The wastewater system at Oro Grande Range Camp collects the sewage from a number of buildings. The collected sewage flows to the northeast for treatment in an oxidation pond. The system consists of 2,375' of 6" sewer lines, 5,560' of 8" sewer lines, and 22 manholes in addition to the oxidation pond. The sewerage system was constructed in 1962.

The wastewater system at North McGregor is very small and consists of only latrines with only one facility flowing to a septic tank and disposal field. (The system was not included in the inventory.)

The wastewater collection system at Dona Ana Range Camp collects the sewage from a number of buildings that drain to two oxidation ponds. A portion of the sewage collected flows to a lift station for pumping to a manhole

that discharges to the oxidation pond. The system consists of 1,535' of 6" sewer lines, 3,740' of 8" sewer lines, and 2,565' of 10" sewer lines. The lift station has a rated capacity of 750 gpm and each of the oxidation ponds has a volume of 5.27 million gallons.

J32.2.1.2 Inventory

Table 1 provides a general listing of the major collection system fixed assets for the Fort Bliss wastewater collection system included in the purchase. The system will be sold in an “as is, where is” condition without any warranty, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Wastewater Collection System Inventory U.S. Army Fort Bliss

Item	Approx. Quantity	Unit	Approximate Year of Construction
Pipe <4"	400	LF	1985
4"	2,280	LF	various
6"	59,323	LF	various
8"	306,215	LF	various
10"	74,194	LF	various
12"	60,100	LF	various
14"	150	LF	1985
15"	28,342	LF	various
16"	4,375	LF	various
18"	1,035	LF	various
20"	2,800	LF	various
21"	9,135	LF	various
24"	2,565	LF	various
30"	2,180	LF	various
Meters	1	Each	1932
Manholes	1,839	Each	various
Lagoons	6	Each	(1) 1942,(4) 1962,(1) 1985
Pump/Lift Stations	5	Each	(1) 1954,(2) 1962, (1) 1985, (1) 1996

LF = linear feet

J32.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any

and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Wastewater Collection System U.S. Army Fort Bliss

Qty	Item	Make/Model	Description	Remarks
None Identified				

TABLE 3
Specialized Equipment and Vehicles
Wastewater Collection System U.S. Army Fort Bliss

Description	Quantity	Location	Maker
None Identified			

J32.2.3 Wastewater System Manuals, Drawings, and Records Inventory

able 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Wastewater Collection System U.S. Army Fort Bliss

Qty	Item	Description	Remarks
None			

J32.3 Specific Service Requirements

None Identified.

J32.4 Current Service Arrangement

All sewage generated on U.S. Army Fort Bliss is collected by the sewer system and pumped to the City of El Paso for treatment, except for a lagoon that is in Area 637. There are no treatment facilities, other than the lagoon in Area 637, on the Main Post at U.S. Army Fort Bliss. Since many of the ranges are in remote locations, many have sewage lagoons that provide treatment.

J32.5 Secondary Metering

There are currently no requirements for secondary metering of wastewater included in this contract. Any future wastewater secondary metering requested by the Government will be IAW paragraph C.3, Future Secondary Meters.

J32.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name:

Address:

Phone number:

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long-term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:

Address:

Phone number:

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:

Address:

Phone number:

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name:

Address:

Phone number:

J32.7 Infiltration and Inflow (I&I) Projects

IAW paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I:

None

J32.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Fort Bliss boundaries to include the main cantonment area, Site Monitor Station, McGregor Range, Oro Grande, Dona Ana Range Camp, Biggs Army Airfield, Logan Heights and Tobin Wells Area.

Nearby to U.S. Army Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, and laboratory facilities that support the hospital activities and other Fort Bliss active and tenant components. The requirement for sewage service is part of and associated with this scope.

J32.9 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** lists service connections and disconnections required upon transfer, and **Table 6** lists the improvement projects required upon transfer of the Fort Bliss wastewater collection system.

TABLE 5
Service Connections and Disconnections
Wastewater Collection System U.S. Army Fort Bliss

Location	Description
None Identified	

J32.10 Specific Transition Requirements

None Identified.

J32.11 Government Recognized System Deficiencies

Table 6 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Fort Bliss wastewater system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

The Ft. Bliss, Directorate of Publics Works has identified system deficiency(s) in the following areas; 5100, 5200, 6000 – 6599, 7300 and 7400. The identified deficiencies in these areas require repair to the sewer main(s); however, the 6000 – 6599 area requires sewer line replacement. In addition, oxidation ponds in the McGregor Range Camp Alternative 2, Dona Ana Range Camp Alternative 5, Oro Grande Range Camp alternative 4, and Meyer Range Camp Alternative 5 require repair. Also, a postwide requirement to repair manholes is identified.

TABLE 6
System Deficiencies
Wastewater Collection System U.S. Army Fort Bliss

Project Location	Project Description
Postwide	Video all sewage lines and compile a list of requires repairs
Area 6000 – 6599	Replace sewer mains and laterals
Area 5100 & 5200	Repair sewer main
Area 7300 & 7400	Repair sewer main
McGregor Range Camp	Repair oxidation pond

Alternative 2	
Dona Ana Range Camp	Repair oxidation pond
Alternative 5	
Oro Grande Range Camp	Repair oxidation pond
Alternative 4	
Meyer Range Camp	Repair oxidation pond
Alternative 5	
Postwide	Repair sewer manholes

J32.12 Wastewater Collection System Points of Demarcation

The point of demarcation is defined as the point on the wastewater collection pipe where ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served.

Point of Demarcation	Applicable Scenario	Sketch
Point where the service line enters the structure	Sewer system flow meter is located on the service line entering the structure.	
Point of demarcation is the cleanout device. if within 10' of the building perimeter	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	
Point where the service line enters the structure <i>Note: A new cleanout device should be installed within 10' of building during any stoppage or maintenance action. This will then become the new point of demarcation.</i>	No flow meter or cleanout exists on the service line entering the structure.	

J32.13 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above categories.

Building No.	Point of Demarcation Description
None	

J32.14 Plants

Description	Facility Number	State Coordinates	Other Information
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Description	Facility Number	State Coordinates	Other Information
None			